

Product Specifications



LDF6-50

LDF6-50, HELIAX® Low Density Foam Coaxial Cable, corrugated copper, 1-1/4 in, black PE jacket



CHARACTERISTICS

Construction Materials

Jacket Material	PE
Dielectric Material	Foam PE
Flexibility	Standard
Inner Conductor Material	Copper tube
Jacket Color	Black
Outer Conductor Material	Corrugated copper

Dimensions

Nominal Size	1-1/4 in
Cable Weight	0.63 lb/ft
Diameter Over Dielectric	1.330 in 33.782 mm
Diameter Over Jacket	1.550 in 39.370 mm
Inner Conductor OD	0.520 in 13.208 mm
Outer Conductor OD	1.410 in 35.814 mm

Electrical Specifications

Cable Impedance	50 ohm \pm 1 ohm
Capacitance	23 pF/ft 7513 pF/m
dc Resistance, Inner Conductor	0.220 ohms/kft
dc Resistance, Outer Conductor	0.190 ohms/kft
dc Test Voltage	9000 V
Inductance	0.056 μ H/ft 0.184 μ H/m
Insulation Resistance	100000 MOhm
Jacket Spark Test Voltage (rms)	10000 V
Operating Frequency Band	1 – 3300 MHz
Peak Power	205.0 kW
Pulse Reflection	0.5%
Velocity	89%

Environmental Specifications

Installation Temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Operating Temperature	-55 °C to +85 °C (-67 °F to +185 °F)
Storage Temperature	-70 °C to +85 °C (-94 °F to +185 °F)

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Mechanical Specifications

Bending Moment	36.0 ft lb 48.8 N-m
Flat Plate Crush Strength	125.0 lb/in
Minimum Bend Radius, Multiple Bends	15.00 in 381.00 mm
Minimum Bend Radius, Single Bend	6.00 in 152.40 mm
Number of Bends, minimum	15
Number of Bends, typical	40
Tensile Strength	1300 lb 590 kg

Standard Conditions

Attenuation, Ambient Temperature	68 °F 20 °C
Average Power, Ambient Temperature	104 °F 40 °C
Average Power, Inner Conductor Temperature	212 °F 100 °C

Attenuation

Frequency (MHz)	Attenuation (dB/100 ft)	Attenuation (dB/100 m)	Average Power (kW)
0.5	0.016	0.053	180.58
1	0.023	0.075	127.47
1.5	0.028	0.092	103.95
2	0.033	0.107	89.92
10	0.074	0.241	39.82
20	0.105	0.344	27.95
30	0.129	0.423	22.69
50	0.168	0.551	17.42
88	0.226	0.741	12.96
100	0.242	0.792	12.12
108	0.252	0.825	11.64
150	0.299	0.982	9.78
174	0.324	1.063	9.03
200	0.349	1.146	8.38
300	0.435	1.427	6.73
400	0.509	1.671	5.75
450	0.544	1.784	5.38
500	0.576	1.891	5.08
512	0.584	1.917	5.01
600	0.638	2.095	4.58
700	0.696	2.285	4.20
800	0.751	2.465	3.90
824	0.764	2.507	3.83
894	0.801	2.627	3.66
960	0.834	2.737	3.51
1000	0.854	2.802	3.43
1250	0.972	3.19	3.01
1500	1.082	3.551	2.70
1700	1.166	3.825	2.51

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1800	1.206	3.958	2.43
2000	1.285	4.216	2.28
2100	1.323	4.342	2.21
2200	1.361	4.466	2.15
2300	1.398	4.588	2.09
2500	1.472	4.828	1.99
2700	1.543	5.062	1.90
3000	1.646	5.402	1.78

Regulatory Compliance/Certifications

Agency

RoHS 2002/95/EC

Classification

Compliant

